

09/441, 242 Applicant Page 3
Exhib. B

Db MSPSOLVPELPLMOLYPRKORXSCDSMWOLYHFKFEDVEMLELIDSE 112

RESULT 3
MTC2_HUMAN STANDARD; PRT; 107 AA.
AC P56278;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE P13 MTC2-1 protein (Mature T-cell proliferation-1 type B1) (MTC2-1 type B1) (P13MTC21).
GN MTC21 OR C6.1B.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=T-cell;
RX MEDLINE=93368950; PubMed=8361760;
RA Stern M.-H., Soulier J., Rosenzweig M., Nakahara K., Canki-Klain N., Aurias A., Sigaux F., Kirsch I.R.;
RT "MTC2-1: a novel gene on the human chromosome Xq28 translocated to the T cell receptor alpha/delta locus in mature T cell proliferations";
RL Oncogene 8:2475-2483(1993).
RN [2]
RP X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
RX MEDLINE=98188217; PubMed=9520380;
RA Fu Z.O., du Bois G.C., Song S.P., Kulikovskaya I., Virgilio L., Rohsstein J.L., Croce C.M., Weber I.T., Harrison R.W.;
RT "Crystal structure of MTC2-1: implications for role of TCL-1 and MTC2-1 in T cell malignancies";
RL Proc. Natl. Acad. Sci. U.S.A. 95:3413-3418(1998).
CC -1- ALTERNATIVE PRODUCTS:
OS Event=Alternative splicing; Named isoforms=2;
CC Name=Long; Synonyms=Type B1, P13 MTC21;
CC IsoId=P56278-1; Sequence=Displayed;
CC Name=Short; Synonyms=Type A, P8 MTC21;
CC IsoId=P56277-1; Sequence=External;
CC -1- TISSUE SPECIFICITY: Not found at a significant level in any tissue.
CC -1- DISEASE: Detected in T-cell leukemia bearing a t(X;14) translocation. Plays a key role in T-cell prolymphocytic leukemia.
CC -1- SIMILARITY: Belongs to the TCL1 family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@sib-sib.ch).
CC -----
DR EMBL; Z24459; CAA80828.1; -
DR PIR; S78532; S78532.
DR PDB; 1A1X; 27-MAY-98.
DR PDB; 1QTT; 19-JAN-01.
DR PDB; 1QTU; 19-JAN-01.
DR Genew; HGNC:7423; MTC21.
DR MIM; 300116; -
DR GO; GO:0008283; P-cell proliferation; TAS.
DR GO; GO:0000074; P-regulation of cell cycle; TAS.
DR InterPro; IPR004832; TCL1_MTC21.
DR Pfam; PFO1840; TCL1_MTC21; 1.
DR ProDom; PD015575; TCL1B; 1.
KW Proto-oncogene; Chromosomal translocation; Alternative splicing;
3D-structure.
FT STRAND 12 17
FT TURN 18 19
FT STRAND 20 23

FT TURN 24 25
FT STRAND 28 35
FT STRAND 40 45
FT HELIX 57 60
FT TURN 61 62
FT STRAND 68 72
FT TURN 73 75
FT STRAND 76 79
FT TURN 80 81
FT STRAND 84 93
FT TURN 94 95
FT STRAND 96 103
SQ SEQUENCE 107 AA; 12600 MM; C00967ELAECDDDCA CRC64;
Query Match 36.1%; Score 221; DB 1; Length 107;
Best Local Similarity 40.2%; Pred. No. 1e-17;
Matches 43; Conservative 23; Mismatches 39; Indels 2; Gaps 1;

Qy 7 GEAVTHPDLNAMEKVVYLDKQKAMPLTIEIKDRLQRLVLRBDVYLGKMTPTQI 66
Db 3 GEDVGAPFDHLMVQEGIVYDEYQRTWVAVEETSPLRKV--QQIQVPLGDARSHL 60
Qy 67 GPSLPIPMQOLYPRGRYSSDSFWRVYHIXIDGVEMLELIPDD 113
Db 61 LTSOLPLMOLYPERIMDNNSRLMOQHILMVGVELIKLIPDD 107

RESULT 4
MTC2_MOUSE STANDARD; PRT; 107 AA.
AC Q60945;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE P13 MTC2-1 protein (Mature T-cell proliferation-1 type B1) (MTC2-1 type B1) (P13MTC21).
GN MTC21 OR C6.1B.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=T-cell;
RX MEDLINE=96202516; PubMed=8634440;
RA Madani A., Choukroun V., Soulier J., Cacheux V., Claisse J.-F., Valensi F., Daliphard S., Cazin B., Levy V., Leblond V., Daniel M.-T., Sigaux F., Stern M.-H.;
RT "Expression of p13MTC21 is restricted to mature T-cell proliferations with t(X;14) translocations";
RL Blood 87:1923-1927(1996).
CC -1- ALTERNATIVE PRODUCTS:
OS Event=Alternative splicing; Named isoforms=2;
CC Name=Long; Synonyms=Type B1, P13 MTC2-1;
CC IsoId=Q60945-1; Sequence=Displayed;
CC Name=Short; Synonyms=Type A, P8 MTC2-1;
CC IsoId=Q61908-1; Sequence=External;
CC -1- TISSUE SPECIFICITY: Not found at a significant level in any tissue.
CC -1- SIMILARITY: Belongs to the TCL1 family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@sib-sib.ch).
CC -----
DR EMBL; U32332; AAC52444.1; -
DR HSSP; P56278; 1A1X.
DR MGD; MGI:102699; MTC21.
DR InterPro; IPR004832; TCL1_MTC21.